

Barriers to College Access for Latino/a Adolescents: A Comparison of Theoretical Frameworks

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Abstract:

A comprehensive description of barriers to college access for Latino/a adolescents is an important step toward improving educational outcomes. However, relevant scholarship on barriers has not been synthesized in a way that promotes coherent formulation of intervention strategies or constructive scholarly discussion. The goal of this article is to synthesize the barriers literature briefly as a basis for comparing and evaluating possible frameworks for addressing barriers. The bridging multiple worlds model, social capital theory, and social cognitive career theory are 3 possible frameworks for addressing barriers to college access for Latinos/as. Implications are given for future barriers research and programmatic interventions.

Keywords: barriers | college access | Latino/a students

Article:

In recent years, a diverse community of scholars has addressed the topic of barriers to college access for Latino/a youth. Reports have indicated that although 89% of Latino/a adolescents stated that a college education was valuable for success in life, slightly less than half indicated that they planned to get a degree, and only 32% of Latino/a youth were enrolled in college (Pew Hispanic Center, 2009, 2011). Turner and Garcia (2005) noted that “studies point to a labyrinth of historical, cultural, social, bureaucratic, political, and economic barriers to a quality higher education for Latinas/os” (p. 178). This wide range of identified barriers reflects the diversity of participating scholars from the disciplines of counseling, cultural studies, economics, education, leadership and policy studies, psychology, and sociology. These multiple perspectives in research have created a broad and rich conversation around the common desire to improve rates of college access for Latino/a youth. However, researchers have not had a common theoretical framework to describe the origins or impacts of identified barriers to access or coherent strategies about the best interventions or most effective approaches to research regarding the barriers.

Although there is value in incorporating multiple perspectives in the early stages of exploration, the state of research around barriers to college for Latinos/as may have matured to the point that a synthesis of the literature could generate greater momentum in terms of framing interventions or policies. In the current article, I seek to (a) synthesize the literature on barriers to college access for Latinos/as (b) describe existing theoretical frameworks or models for addressing barriers, with particular focus on the bridging multiple worlds model (Cooper, 2011), social capital theory (Bourdieu, 1977), and social cognitive career theory (SCCT; Lent, Brown, & Hackett, 1994); and (c) evaluate the utility of the most comprehensive theoretical frameworks in barriers research. Such an evaluation is important because a well-articulated conceptual framework for research and practice creates a map of the territory to be explored and the most effective way to navigate (Ravitch & Riggan, 2012). To utilize a metaphor, a scattered approach to a field of research may resemble puzzle pieces dumped onto a table, but an effective conceptual framework would connect those pieces and formulate a more coherent image of the subject under study. With an effective conceptual framework, researchers can define key variables or constructs, indicate how constructs are related, identify which variables have been absent from previous investigations, and highlight where appropriate policy or intervention efforts may be applied for best effect. Although scholars or practitioners working on barriers to education for Latinos/as do not have to agree on one framework, it would serve their common interests to define the essential puzzle pieces, evaluate the available empirical support, and describe how the key constructs may connect.

A SYNTHESIS OF THE BARRIERS LITERATURE

The purpose of the current article is not to conduct a comprehensive review of the literature on barriers to college access but to summarize the scholarly terrain in order to be in a position to compare theoretical frameworks for responding to those barriers. Toward this purpose, literature was excluded if it dealt primarily with barriers to degree completion among college students, addressed broad educational pipeline issues without a specific focus on barriers, or focused primarily on supports and resources for educational access (e.g., the cultural wealth model; Yosso, 2005). Having carefully studied the literature describing barriers to Latino/a college access, I present my synthesis of the themes I identified therein. Many of the barriers pertained to the more disadvantaged portions of the U.S. Latino/a community, such as undocumented immigrants, low-income or low-educational-legacy families, or families in poorly resourced communities or schools. Thus, some of the barriers are not culture specific and may also be present in other disadvantaged families. For example, families with low income levels face a thorny set of interconnected barriers to educational access regardless of their racial/ethnic background. In addition, not all Latino/a adolescents would be facing all barriers listed, as the pan-ethnic group is quite varied and some portions have greater access or resources.

In my thematic synthesis of the literature, barriers to college access for Latinos/as clustered in three areas: relational (i.e., family and peers), individual, and systemic. A comprehensive conceptual framework for studying barriers would need to describe and connect all three areas.

Relational Barriers

Relational barriers centered on the diminished ability of key persons (e.g., family, friends, community members) to assist with college access. These barriers were documented empirically (with both qualitative and quantitative data) in the majority of the studies, forming a strong base of evidence. Family demographic variables as barriers were mentioned often in the literature, including low levels of family access to college planning information, overestimation of costs of college, less awareness regarding steps for college application, and less parental involvement because of limitations of language or time (Auerbach, 2004; Bohon, Macpherson, & Atilas, 2005; Downs et al., 2008; Fann, Jarsky, & McDonough, 2009; Gandara, 2002; Grodsky & Jones, 2007; Kimura-Walsh, Yamamura, Griffin, & Allen, 2009; Oliva, 2008). In addition, barriers of low parental education completion, family socioeconomic status, and immigration/legal status were addressed frequently (Auerbach, 2002; Bohon, Johnson, & Gorman, 2006; Cates & Schaeffle, 2011; Perez, 2010; Storlie, Moreno, & Portman, 2014; Tseng, 2006). For immigrant Latinos/as or those with traditional cultural values, family loyalty and obligation could also compete with the drive to go to college (McWhirter, Torres, Salgado, & Valdez, 2007). The presence or absence of college-educated or college-bound role models was also a prominent theme in the literature related to family, peers, or friends of Latino/a students (Azmitia & Cooper, 2001; Calaff, 2009; Gandara, 2002; Kao & Thompson, 2003; Moran, Cooper, López, & Goza, 2009; Ohrt, Lambie, & Ieva, 2009). In addition, peer pressure was discussed, including both negative pressure from other Latinos/as who might be engaging in gangs, drug use, or early parenthood or simply dropping out of school to get work and a paycheck and positive influence from peers in college access programs who encouraged one another to persist (Azmitia & Cooper, 2001; Gandara, 2002). In summary, many of the relational barriers are due to lower levels of familiarity with the U.S. system of higher education, which may present an opportunity for school and community outreach.

Individual Barriers

Individual-level barriers identified in the literature often focused on students' academic readiness for college, such as level of English language skills, math proficiency, or study skills (Cabrera et al., 2006; Engle, Bermeo, & O'Brien, 2006; Swail, Cabrera, & Lee, 2004). These descriptions do not fit all Latino/a youth, but even high-achieving Latinos/as are less likely than similar peers in other racial/ethnic groups to complete a college application or other steps toward college eligibility (Gonzalez, 2012; Hurtado, Inkelas, Briggs, & Rhee, 1997; Klasik, 2012; Swail et al., 2004). Individual barriers for Latino/a students also encompassed decreases in confidence and motivation, fluctuations in educational aspirations (Gonzalez, Stein, & Huq, 2013; Denner, Cooper, Dunbar, & Lopez, 2005; Lozano, Watt, & Huerta, 2009; McWhirter et al., 2007; Nuñez, 2009; Nuñez & Oliva, 2009), individual experiences of discrimination (Auerbach, 2002; Griffin, Allen, Kimura-Walsh, & Yamamura, 2007; Kao & Thompson, 2003; Ohrt et al., 2009), and acculturation to Latino/a versus Anglo norms (L. Y. Flores, Navarro, & DeWitz, 2008). The evidence base for academic readiness has been quantified in school-based data, whereas studies regarding motivation, aspirations, and culture-based experiences are both qualitative and quantitative. In sum, barriers related to proficiency and attitude help researchers understand that individual readiness may go beyond skills to also include impacts of the environment on a student's motivation or sense of distress (Close & Solberg, 2008).

Systemic Barriers

Finally, systemic or institutional barriers to Latino/a college access have also been described in the literature. It is more challenging to describe the specific impact of a macrolevel institutional barrier or find an empirical link between macrolevel barriers and microlevel outcomes (e.g., educational access). Systemic barriers are part of the context, so they were often described in these studies as background or environment—not necessarily as the focal point of investigation. Examples at the school level included policies and practices such as tracking Latinos/as into lower level courses or poor outreach and communication with families (Calaff, 2009; Downs et al., 2008; Irizarry, 2012; Kao & Thompson, 2003; Rios-Aguilar & Kiyama, 2012). Researchers also described the absence of college preparatory curricula, counseling/instructional resources, testing preparation, or college access/readiness programs in some schools (Adelman, 2006; Cates & Schaeffle, 2011; Kimura-Walsh et al., 2009; Lozano et al., 2009; Martin, Karabel, & Jaquez, 2005; Ohrt et al., 2009; Teranishi & Parker, 2010; Walpole et al., 2005). Community-level barriers included lower levels of educational outreach, resources, and support, potentially including impoverished or dangerous schools and neighborhoods (Azmitia & Cooper, 2001; Calaff, 2009; Denner et al., 2005; Nuñez, 2009; Nuñez & Oliva, 2009). Researchers also mentioned state or national barriers, such as the rising costs of college and reductions in the availability of financial aid (Downs et al., 2008; Zarate & Burciaga, 2010) and policies restricting access to education for the undocumented portion of the population (S. M. Flores & Chapa, 2009). Systemic barriers (e.g., low-income schools) can be both influential and challenging to address in practice but essential to consider in research models.

THEORETICAL FRAMEWORKS

In addition to synthesizing themes in barriers to college access, I also examined what theoretical frameworks, if any, were used in the articles. Approximately half of the literature did not espouse any theoretical framework; often these were qualitative studies seeking to understand the phenomenon or studies evaluating the impact of an existing intervention on college access–related variables. Theoretical frameworks that were utilized only once included the opportunity to learn framework (Kimura-Walsh et al., 2009), self-determination theory (Close & Solberg, 2008), and the funds of knowledge approach (Rios-Aguilar & Kiyama, 2012). The most frequently mentioned theories or frameworks related to barriers to college access were the bridging multiple worlds alliance (BMWA) model (Azmitia & Cooper, 2001; Calaff, 2009; Cooper, 2011; Denner et al., 2005; Moran, Cooper, Lopez, & Goza, 2009) and social capital theory (Bourdieu, 1977; Nunez, 2009; Stanton-Salazar, 1997). The bridging multiple worlds model has a strong basis in practice, with intervention programs attempting to support low-income, immigrant, and ethnic minority students from preschool to graduate school (BMWA, n.d.). Social capital theory is primarily conceptual, with underpinnings in sociology (Bourdieu, 1977). These frameworks are described in more detail as they address relational, individual, and systemic barriers to access. I then describe SCCT (Lent et al., 1994) as a new framework with the potential to help scholars and practitioners further their work on barriers to college access. The discussion compares the strengths of each of these frameworks in an effort to help researchers and practitioners identify the most applicable models for future work.

Bridging Multiple Worlds

Building on a background of psychology, anthropology, and education, Cooper (2011) and the BMWA created a model to describe “how culturally diverse youth navigate across their cultural worlds on pathways toward college and career” (p. 10). BMWA is a type of ecological model that describes how the social systems that influence Latino/a youth (e.g., families, schools, neighborhoods) often function separately, like completely different worlds. The model examines five dimensions over time: family characteristics, youth identity and aspiration formation, academic pathways or experiences, challenges and resources across contexts, and availability of partnerships. Barriers are briefly mentioned in each of the five areas but primarily addressed in the fourth dimension, which is challenges and resources across contexts. Contexts, in this framework, include families, peers, schools, community support programs, and affiliated groups (e.g., religious communities, sports teams). Although the word *challenges* is used in BMWA articles rather than *barriers*, Cooper and colleagues describe relational (e.g., parental educational attainment, family socioeconomic status, role of peers), individual (e.g., language barriers, experiences of discrimination), and systemic (e.g., neighborhood violence, school personnel as gatekeepers, low levels of community resources or programs) barriers.

The BMWA model is holistic in that it attends simultaneously to the needs of students in their homes, neighborhoods, schools, and larger communities (Calaff, 2009). For students with disparate social worlds and multiple needs or barriers, any solution must cross contexts. The BMWA team has convened events and created resources meant to bridge the multiple worlds of the student, including families, schools, universities, and community support agencies (Cooper, 2011). Thus, the BMWA framework has strength in its broad scope, addressing multiple parts of a child’s ecosystem in a way that is inclusive, not divisive.

The BMWA research team has created sample evaluation questions and forms to help assess each of the five dimensions of the model, gathering initial descriptive research support for these relational, individual, and systemic components. For example, barriers are assessed by asking, “What are your challenges to reaching your goals?” and responses are coded to create a qualitative portrait of students’ lives. Cooper (2011) indicated, “The more we understand why and how students stay on or slip off their pathways to college and careers, the more effectively we can support them” (p. 127). The research team tends toward a qualitative methodology and a practitioner- or community-based view of research.

One of the studies by the BMWA research team can be used to demonstrate the utility of the model in examining barriers to college access. Calaff (2009) undertook a rich ethnography of nine Latino/a students who were enrolled in a BMWA college preparation program in the community. Data collection included individual interviews with the students and their family members, observations at the college preparation program and the public high school, focus groups with students at the school, and a review of school records. In her findings, Calaff described three profiles of students/families as they developed aspirations for college, named the “immigrant,” the “middle class,” and the “tough life.” For each profile, Calaff depicted the types of needs/barriers for those students and the sources of support they could draw on. Conceptually speaking, these profiles showed that students with greater barriers across their worlds would

need to draw on community, school, and intervention program resources to a greater extent, with family providing motivation but not academic, financial, or social support for college going.

The BMWA model and studies highlight the rich perspective that emerges when students are considered holistically, relationally, and within their cultural ecosystem (Cooper, 2011). The BMWA team has a commendable focus on eliminating barriers in practice, providing direct benefit to Latino/a and other students. The BMWA model reminds researchers and practitioners of the value of culturally sensitive partnerships, including family and community along with university and school system. The framework has much to offer future practitioners seeking tools, materials, ideas, and contexts for intervention. The studies conducted under the umbrella of the BMWA provide promising evidence that Latino/a students need support in multiple contexts in order to surmount the barriers that may exist.

Possible weaknesses in the BMWA model (Cooper, 2011) are that the five dimensions of the model seem to be derived inductively from anthropological observation of students and families in the communities of interest, and thus the constructs are not operationally defined and the general principles may not hold in all cases. In addition, the model is broadly descriptive of the ecology, or multiple worlds, inhabited by students but does not provide focus in terms of how or where to intervene effectively in these complex contexts. The framework may not be as useful for quantitative researchers or program evaluators seeking an intervention that can be disseminated more broadly. Generalizability is not possible with smaller qualitative samples, although this is not the goal.

Social Capital Theory

Social capital can be defined as “resources embedded in a social structure which are accessed and/or mobilized in purposive action” (Lin, 1999, p. 35), which in this case would be social connections used to enhance college access. Lin stated that most social capital scholars are interested in the structure of a network, the opportunity individuals have to access it, and individuals’ actual use of the network available to them. Thus, barriers to college access from a social capital point of view would include restricted structure or size of a network, lack of access to other resources or networks, or low usage of a given network. An implicit rationale for scholars choosing this framework for examining barriers to educational access is the disadvantaged social position occupied by some (but not all) in the U.S. Latino/a community. A social capital view of barriers is useful because it focuses on resources available in a given network rather than blaming a student or family for certain cultural characteristics, such as being a working-class immigrant with evolving English literacy (McDonough & Nunez, 2007; Stanton-Salazar, 1997).

Many social capital theorists strive to remain value-neutral about social networks (Lin, 1999). Each network contains some sort of capital and thus provides both supports and barriers for its members. For example, researchers have demonstrated a propensity for Latino/a adolescents in the United States to choose a college based on advice from family members or to attend a college near home where other family and friends have gone (Perez & McDonough, 2008). Thus, utilization of the social network could be seen as a support that helps Latino/a students access college or as a barrier that prevents them from contacting other resources, such as school

counselors or college admissions representatives, limiting their full range of exploration. If a given social network does not contain college access resources, it could be viewed as unable to provide support around that goal but perhaps able to provide other resources, such as job opportunities or emotional encouragement (Gonzalez, Stoner, & Jovel, 2003).

In addition to these strengths, social capital theory also has some limitations (Schuller, Baron, & Field, 2000). The constructs in social capital theory are defined broadly, which engenders some disagreement about how to interpret them, leading to additional difficulty when one is considering which proxies to utilize in attempts to measure or evaluate them (Schuller et al., 2000). At times, social capital analyses exclude the human agency of the individual as a variable of interest, which renders somewhat invisible the motivated and hard-working students who beat the odds and enter colleges even with minimal access to social capital. The concept of habitus within social capital does include individual beliefs about what is possible (Núñez & Oliva, 2009), but it is underutilized in barriers research. Finally, social capital theory is a conceptual guide and descriptive of resource networks but may not be of aid to a researcher attempting to quantify the impact of other types of barriers to college access, such as individual motivation, experiences of discrimination, or academic preparedness. It also has limitations for a helping professional seeking to create a program to overcome barriers, as it may not provide specific strategies or targets for intervention beyond structure, opportunity, and utilization of a network.

These descriptions highlight the fact that social capital theory has its roots in sociological or systems-level analysis. Although social capital theory can encompass the individual level, most of the research reviewed as part of the current article focused beyond individual students on their networks, resources, and context (i.e., relational and systems-level barriers). Examples include level of college awareness and knowledge possessed by parents (Auerbach, 2004); socioeconomic class differences in available school and family resources (Kao & Thompson, 2003); the role of coordinated K–16 programs in promoting college access for some students (Gandara, 2002; Núñez, 2009; Oliva & Nora, 2004); the role of parents, siblings, teachers, counselors, and peers as agents of social capital (Gonzalez et al., 2003); and regional differences in the availability of state policy support for undocumented immigrants to attend college (S. M. Flores & Chapa, 2009). Two studies are examined further here to illustrate both the strengths and possible liabilities of a social capital framework for researching or intervening on barriers.

Gonzalez et al. (2003) completed a qualitative study to determine how much social capital would be necessary to improve the college opportunities of Latina high school students, which source of social capital would be the most effective, and in what ways students might access those sources. The authors included a figure to describe individuals and groups who might or might not serve as agents of positive social capital and a continuum from high to low volume of social capital transmitted. For example, the researchers noted that emotional support transferred from Latino/a parents to children “represented low-volume social capital and was not sufficient for the students to acquire the opportunity to attend college” (p. 154). Gonzalez et al. described the high-volume social capital acquired from specialized college access counselors as “emotional support, privileged information, and in many cases, access to rare opportunities for college” (p. 162). They also described systems-level policies such as educational tracking or school personnel who

were discouraging to Latino/a students as negative influences on the opportunity to develop social capital. Their qualitative research underscored that underrepresented students have less culturally derived information about college as well as fewer networks through which to gain the needed information. They made recommendations about educational systems (e.g., tracking policies) and school-based relationships that could enhance social capital but no individual-level recommendations.

Another example comes from the Migrant Student Leadership Institute (MSLI). The MSLI was a program for working with migrant Latino/a students to help “gain social capital in the form of encouragement and personal connections with [university] faculty and students” (Nuñez, 2009, p. 192). Social capital was identified as an important resource to cultivate in the MSLI partly based on the Gonzalez et al. (2003) study and partly because the nature of being in a migrant family means that social networks are more transient and less established. The MSLI also sought to increase individual academic preparedness by including high-level coursework and instructions about the college application process, resources that were not previously present in the network of the migrant students. Because university faculty and students were involved in the delivery of the program, there was exposure to a new social network. The 5-week MSLI program resulted in a higher rate of applications to the flagship university system among program participants than among a matched set of nonparticipants; 66% of the MSLI students eventually enrolled in some type of postsecondary institution. It is not possible to determine whether the increases in academic skills or the exposure to a new network was the most influential factor, but it seems clear that a program addressing individual, relational, and systemic barriers based in social capital theory demonstrated positive results.

As seen in these examples, social capital theory has some strengths and limitations in describing or addressing supports and barriers to college access for Latinos/as. The interventions that injected new resources into students’ networks (e.g., MSLI) were consonant with social capital theory, and the portions that augmented individual students’ skills could be seen as supplemental to social capital theory (i.e., not based in original definitions of social capital). Social capital theory promotes a better understanding of structure, opportunity, and use of one’s network of connections but would not provide a template for how the MSLI faculty and student mentors should interact with the migrant student participants, what topics would be most advantageous to cover with a mentor, or how long the intervention would need to continue in order to build high-volume social capital. Thus, social capital theory is a conceptual guide but may not help researchers and practitioners in their efforts to operationalize constructs.

Social Cognitive Career Theory

I present Social Cognitive Career Theory (SCCT) as a comparison to the BMWA and social capital theory because (a) it also includes individual, relational, and systemic constructs relevant to the study of barriers to access; and (b) it provides more structure to operationalize the concepts. SCCT (Lent et al., 1994) is a conceptual model that depicts how individual, contextual, and experiential factors impact interests, goals, and goal-directed behavior (see Figure 1). It evolved from social learning theory (Bandura, 1999), which emphasizes the interactions among (a) individuals’ abilities/predispositions, (b) the environment they inhabit (i.e., relationships and systems), and (c) their ability to make choices and create meaning. Constructs in these three

areas interact to guide the academic and career development process. According to social learning models, people process their personal attributes and environmental opportunities in several ways. They learn by internalizing social persuasion, vicariously observing role models, mastering smaller steps in a larger task, and noticing their affective reactions to those experiences (Bandura, 1999). Learning experiences can be filtered by positive or negative mindsets or conditioned by feedback from the environment. Most important, individuals can have new and corrective learning experiences as they seek to forge new directions in life.

FIGURE 1. Social cognitive career theory model of person, contextual, and experiential factors affecting choice behavior.

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In general terms, the portion of the SCCT model that relates to generating interest in a career or educational goal is to the left of Figure 1, and the portion that relates to behavioral pursuit of the goals is to the right (Lent et al., 1994). In the first portion of the model, an individual notices his or her given abilities and predispositions (i.e., person inputs) and absorbs influences from the environment (i.e., background contextual affordances). These observations lead to social learning experiences, wherein the person generates meaning about the givens of his or her situation and starts to form beliefs and expectations about the feasibility of particular tasks. For example, an adolescent in a low-wage immigrant family may see the impact that her parents' situation has on their choices about work and may decide through that learning experience that she wants to invest in education in order to have different options. Alternatively, she may internalize the message that Latinos/as typically do not go to college, which would be a negative learning experience impacted by lack of role models or discriminatory statements.

Whereas the BMWA model focuses on ecosystems and relationships, and social capital theory prioritizes the systems level, SCCT has typically focused on the individual and relational levels. For example, a person's self-efficacy beliefs and outcome expectations are of key importance. According to SCCT (Lent et al., 1994), interests cannot be generated by a learning experience alone but by the opportunity to internalize that experience as part of one's self-beliefs. Direct social learning experiences with positive outcomes, such as working with a math tutor and correctly solving one's homework problems, become internalized as a higher sense of efficacy for those tasks and increased expectations of similar future outcomes (Lent, Brown, & Hackett, 2000). If self-efficacy beliefs and expectations are positive, students are more likely to identify college going as a goal, create a plan, and take steps toward goal attainment (see Figure 1).

Socially disadvantaged students may receive different reinforcement from their contexts for considering or applying to college, and they may have fewer role models, fewer chances for academic mastery experiences, or fewer mentors/supporters to provide verbal encouragement (Betz, 2007). However, the same students can make choices and enact behaviors in order to make progress toward their goals; thus, SCCT highlights the role of individual agency and self-beliefs against the backdrop of social relationships and social systems (Lent et al., 1994). Examples of potential contextual supports include an educational mentoring program, a proactive school counselor, or the motivation a student may internalize from family members. Potential

barriers could be limited school curricula, pressure to work to support the family, or lack of finances. These supports and barriers can be at the individual, relational, and systems levels; indeed, every barrier listed in the literature review could be addressed in this model.

SCCT (Lent et al., 1994) maintains some of the positive contributions of the BMWA model and social capital theory, such as inclusion of the social environment as relevant to an individual's options, and improves on some limitations in terms of identifying and addressing specific barriers to college access. In particular, SCCT (a) spans an individual's given goal, the behaviors needed to reach it, and the social context within which the behavior occurs; (b) focuses on human agency in creating meaning from learning experiences, not solely on network benefits or ecosystem resources; (c) specifies constructs and suggests ways to measure them; (d) shows how barriers are related to other constructs, thus providing model-based strategies for research and intervention; (e) is specific to academic and career development; and (f) includes barriers and supports as an integral part of the theory.

Researchers also have identified some limitations of SCCT (Lent et al., 1994). Because it is a social learning theory, more effort has gone into understanding person-related variables (e.g., self-efficacy, outcome expectations, interests, goals, learning experiences) than systems-level supports and barriers. Flores and her colleagues (L. Y. Flores et al., 2008; L. Y. Flores, Navarro, Smith, & Ploszaj, 2006; L. Y. Flores & O'Brien, 2002; L. Y. Flores & Obasi, 2005; Navarro, Flores, & Worthington, 2007; Ojeda & Flores, 2008) tested SCCT with Latino/a participants in several studies and reported partial confirmation of the model (depending on the age of the sample and the variables being studied). For example, their results were inconclusive regarding the relationship between college self-efficacy, college outcome expectations, and educational goal aspirations in Mexican American high school students but did identify significant paths from college self-efficacy to academic goal progress and academic satisfaction in Mexican American college students.

As with the previous frameworks, a few examples from the literature are provided here in order to illustrate the comparative strengths and weaknesses of SCCT in terms of framing research or interventions. L. Y. Flores and Obasi (2005) sought to learn how mentors and role models could impact the career and educational trajectories of Mexican American high school students in southern Texas. Of interest is that 75% of the participants named family members as their mentors. The researchers examined whether having a mentor impacted self-efficacy beliefs, career choices, and educational interests and what types of mentoring activities were perceived as most helpful by the students. Findings illuminated the importance of verbal encouragement, vicarious role modeling, personal attention and support, and informational guidance as key mentoring tasks. However, the reliance on family members may have skewed the findings in that mentoring had no effect on educational/career interests, self-efficacy, or career choices. Participants may have been able to draw encouragement and guidance from these role models, but there may have been limits to mentors' ability to help with college planning tasks or address systems-level barriers, depending on their familiarity with the educational system. The researchers noted the importance of trust and closeness between mentors and mentees but also suggested that the educational and career attainment of mentors should meet a minimum threshold.

In addition, O'Brien et al. (2000) addressed the circumscription process whereby low-socioeconomic status high school students of color might internalize societal biases and therefore state fewer interests in career opportunities or display fewer exploration behaviors. O'Brien and her colleagues created a career intervention to promote self-efficacy for career decision making among students in an Upward Bound program. The 5-week intervention included (a) reflecting on the values and career modeling students had received in their families of origin; (b) engaging in self-exploration of interests; (c) accessing information about the world of work; (d) overcoming obstacles in decision making, including obstacles specific to persons of color; and (e) creating a plan of action. There were no differences in the treatment and control groups prior to the intervention, but the posttest showed that the treatment group had made gains in career decision making self-efficacy. Note that this intervention specifically included individual, relational, and systems-level topics.

These examples showcase the ways in which SCCT provides more specific or testable hypotheses for research or intervention than BMWA or social capital theory (e.g., Does an effective mentor function by providing verbal encouragement, task modeling, or vicarious learning opportunities?). The studies also highlight the fact that a complex social phenomenon like college access requires complex solutions (e.g., outcome expectations and self-efficacy beliefs were raised by a curriculum, but perceptions of barriers were not changed). I hypothesize that heightened attention to systems in addition to individual and relational barriers will improve the effectiveness of an SCCT-based intervention. For example, the low-socioeconomic status students of color in the O'Brien et al. (2000) study received an intervention that was attentive to their social reality. The authors demonstrated a positive impact on the career decision-making beliefs of the participants.

CONTRIBUTIONS OF BMWA, SOCIAL CAPITAL THEORY, AND SCCT

Each of the three frameworks addressing barriers to college access examines individuals within their contexts but with differing degrees of emphasis and specificity. Whereas social capital theory puts the social network in the foreground, BMWA focuses on relationships in the ecosystem and SCCT prioritizes the individual's learning experiences.

The BMWA model maintains a focus on the interconnected worlds in a student's ecosystem (Cooper, 2011). Students need to maintain relationships in each of those worlds in order to achieve their aspirations and develop their cultural identities. Thus, barriers in the ecosystem must be addressed in a relational and systemic manner, without cutting the student off from home or community or creating a deficit view of cultural groups. A positive example is the P-20 intervention described by Moran et al. (2009), which bridges worlds and provides systemic support but is complicated to arrange and difficult to sustain with collaborative governance. BMWA offers fewer quantifiable or measurable constructs for barriers researchers, which could create measurement difficulties in some studies.

Social capital theory has been applied to college access and has brought attention to the barriers that reside at the group and systems levels: Some families have fewer resources or networks to call on to assist with planning and preparing for postsecondary education. The key contribution of social capital theory has been to move beyond using blaming language to acknowledging that

systems may provide unfair advantages to some when it comes to educational access. Thus, support for college access may mean a new network for a person with little social capital for higher education. The literature has begun to describe what sufficient network resources for college access might entail, but social capital theory does not operationalize barriers in specific terms. It is also the case that a singular focus on social networks could overlook an individual's capacity for striving and change.

SCCT's contribution is in its focus on the power of human agency—the potential for action that resides within individuals even when their circumstances are challenging (Lent et al., 1994). SCCT would define barriers as environmental obstacles, whether due to people, conditions, or resources; supports are seen as facilitative influences from the same categories. However, in SCCT, supports and barriers are embedded in a model, connected to person-level constructs such as self-efficacy beliefs and outcome expectations, and evaluated for their ability to strengthen goal attainment or weaken it (see Figure 1). Supports and barriers are defined with more specificity, which may allow for more refined research questions or more targeted interventions. Researchers have shown that learning experiences can be constructed to raise self-efficacy and intrinsic interest for various tasks, thus diminishing the power of barriers. Although SCCT includes social context, systems-level barriers could be given more consideration.

IMPLICATIONS FOR RESEARCH

I suggest that many of the individual, relational, and systems-level barriers to Latino/a educational access presented in the introduction can be addressed with BMTA or social capital theory but are perhaps more comprehensively viewed through an SCCT lens. Understanding the relationships among the constructs in the SCCT model (Lent et al., 1994) can help researchers move beyond the stage of describing barriers to college access; it allows them to test relationships between individual, relational, or systems-level barriers and other constructs such as learning experiences, self-beliefs, formation of interests, and steps toward goal attainment. Understanding various types of barriers as proximal or distal, as specified by SCCT but not the other models, also is useful when considering research with populations at different developmental stages (e.g., elementary or middle school vs. high school). Lent et al. (2000) indicated that “the presence and effects of most barriers are likely to depend both on the developmental task facing the individual and on the specific choice options he or she is entertaining” (p. 39). This could matter greatly in the future of research and intervention on the barriers to college for Latino/a youth. A distal environmental barrier could be internalized during early learning experiences, thus circumscribing perceptions of what is possible in the future. A research question targeting these early influences would be formulated much differently than a question about proximal barriers that are thwarting a student's ability to follow through on goals.

Additional questions for future research are more easily identified using SCCT (Lent et al., 2000). They include the following: (a) What are the specific characteristics of barriers, and how can they be measured more consistently? (b) How do barriers relate to learning experiences or the self-beliefs that emerge from those experiences? (c) What is the role of social learning in the successful formation of interests and goals? (d) Which mediating and moderating variables describe how, when, and why barriers impact college access? (e) What is the relationship of supports to barriers? (f) What inhibits college access for Latinos/as who have more privilege or

social capital? and (g) How can interventions be tailored depending on the specific barriers encountered or the specific developmental stage of the adolescent? The SCCT model (Lent et al., 1994) also has the potential to allow researchers from various fields to see how their work interrelates and promote more constructive interdisciplinary dialogue.

IMPLICATIONS FOR INTERVENTION

SCCT (Lent et al., 1994) makes clear that individual, relational, and systemic barriers necessitate different types of response from advocates or practitioners and also suggests that comprehensive college access programs must target several types of barriers simultaneously. More specifically, practitioners should be clear what effect is likely to be produced by a given intervention strategy. For example, an individual proximal barrier might be a student's lack of knowledge of the steps for applying to college, a relational proximal barrier might be lack of family and peer support for college-going activities, and a systemic proximal barrier might be lack of school resources to create a college-going climate. The strategies needed for each of these barriers would be different (e.g., information, provision of support, policy change). Interventions could address distal barriers as well, structuring new learning opportunities to remedy early deficits in resources. For example, SCCT suggests that college-educated mentors are useful for younger students with a low family educational legacy because students can experience vicarious learning from a role model, social persuasion from a non-family member, and opportunities to experience mastery of college preparatory tasks (Bandura, 1999). These learning experiences boost the student's self-efficacy for college-going tasks and generate interest in college. The four strategies for raising self-efficacy (i.e., verbal persuasion, modeling, stepwise mastery, and controlled affective response) that are based in social learning theory can be utilized as guides for intervention activities and subsequently evaluated for effectiveness (Bandura, 1999).

CONCLUSION

The scholarship community interested in educational access for Latino/a students needs a theoretical framework that helps describe the relationships among individual, relational, and systems barriers in order to move forward with comprehensive research and programmatic strategies. It is my opinion that SCCT provides a more specific and useful conceptual framework that maps out relationships among constructs and targets for intervention, but BMWA and social capital theory each have shown strengths as models for addressing barriers. In order to make progress on the long list of barriers to college access for Latino/a adolescents, objectives need to be clear and based in a conceptual framework as opposed to being scattered or diffuse. I propose that SCCT can model social influences, learning experiences, and self-beliefs that give rise to academic interests and goals and thus has merit for researchers and practitioners seeking to advance the cause of Latino/a educational access.

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